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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,303	09/11/2003	Nobumasa Suzuki	P24195	3578

7055 7590 12/21/2006
GREENBLUM & BERNSTEIN, P.L.C.
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RESTON, VA 20191

EXAMINER

O CONNOR, CARY E

ART UNIT	PAPER NUMBER
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3732

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	12/21/2006	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 12/21/2006.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary

Application No.

10/659,303

Applicant(s)

SUZUKI ET AL.

Examiner

Cary E. O'Connor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ojima et al (5,147,361) in view of Scharf (6,682,563). Ojima shows, in Figure 4, a vertebra body plate 40 comprising a main body portion a plurality of screw insertion holes 44, 45 that are the only holes in the body portion. The screw holes are the same shape and size and spikes 13 extend from the body portion. Ojima does not disclose that the body portion has a rhombic shape and that the screw holes are provided on at least one of the diagonal lines that connect opposite corners of the body portion. Scharf shows a rhombic vertebra body plate 10 comprising a plurality of screw holes 31, 32 located on the diagonal lines connecting opposite corners of the body portion. Scharf states that the rhombic shape is desirable so that "multiple devices can be utilized on a single spinal column...disposed in relatively close proximity without having the plates members interfere and without reducing the efficacy of the mounting mechanism." (column 2, lines 41-45). It would have been obvious to form the body plate of Ojima in the shape of a rhombus and locate the holes on the diagonal lines, as taught by Scharf, so that a plurality of plates may be used in close proximity without reducing efficacy of the system. As to claims 2 and 3, Ojima, as modified by Scharf, discloses the claimed

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invention except for the spikes having a V-shaped cross section. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the spike with a V-shaped cross section, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a bone gripping means. In re Dailey and Eilers, 149 USPQ 47 (1966). As to claim 5, given the similarity in the shapes of Scharf's plate and applicant's plate, it is held that the plate of Ojima as modified by Scharf is formed to have a curved shaped corresponding to a peripheral surface of a vertebral body.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scharf (6,682,563) in view of Errico et al (6,780,186). Scharf shows a rhombic vertebra body plate 10 comprising a plurality of screw holes 31, 32 located on the diagonal lines connecting opposite corners of the body portion. The plate also includes spikes 25. Scharf discloses that the holes 31 and 32 have different shapes and sizes. Errico shows a bone plate having screw holes 110 located on diagonal lines connection opposite corners. These holes are of same shape (elongated) and size (see Figure 1a, column 6, lines 30-33) so that "coupling elements 132 are free to move independently and selectively moved by the surgeon...into the ideal position". It would have been obvious to one of ordinary skill in the art at the time the invention was made to form all the holes of Scharf as taught by Errico, so that the coupling elements may be positioned in the ideal position during surgery. As to claims 2 and 3, Scharf discloses the claimed invention except for the spikes having a V-shaped cross section. It would have been an

obvious matter of design choice to one skilled in the art at the time the invention was made to construct the spike with a V-shaped cross section, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a bone gripping means. In re Dailey and Eilers, 149 USPQ 47 (1966). As to claim 5, given the similarity in the shapes of Scharf's plate and applicant's plate, it is held that the plate of Scharf is formed to have a curved shaped corresponding to a peripheral surface of a vertebral body.

Response to Arguments


Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 571-272-4715. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-2724964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cary E. O'Connor
Primary Examiner
Art Unit 3732

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